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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,331	07/09/2003	Stephen E. Terry	I-2-0409.1US	1330

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EXAMINER	
NGUYEN, TOAN D	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/616,331	TERRY ET AL.	
	Examiner	Art Unit	
	Toan D. Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/27/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: The application claims benefit of 60/410,737 on 04/05/2002 on page 1 is inconsistent with PTO records.

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 3-5 are objected to because of the following informalities:

In claim 3 line 2, it is suggested to change "the buffer" to --- the reordering buffer ---. Similar problems exist in claim 4 line 1, and claim 5 line 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 4, 15, 16 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the last PDU" in line 2. There is insufficient antecedent basis for this limitation in the claim. Similar problems exist in claim 15 line 2, claim 16 line 1, and claim 26 lines 1 and 2.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (US 2003/0016698) as applied to the claims above, and further in view of Vayanos et al. (US 6,901,063).

For claims 1-6, Chang et al. disclose method for resetting MAC layer entity in a W-CDMA communication system using HSDPA comprising:

the RNC for generating a MAC layer reset notification (figure 9, reference step 911, paragraphs [0068] to [0071]);

a control unit within said UE for receiving said notification (figure 18, reference step 1805, paragraph [0092]); and

transmission means for transmitting said status report to said RNC (figure 18, reference step 1811, paragraph [0092]).

However, Chang et al. do not expressly disclose:

flushing said at least one reordering buffer;

status means within said UE for determining, subsequent to the flushing of said reordering buffer, the status of PDUS received by the UE, and for generating a status report based upon said determination.

In an analogous art, Vayanos et al. disclose:

flushing said at least one reordering buffer (figure 7A, col. 16 line 64 to col. 17 line 50);

status means within said UE for determining, subsequent to the flushing of said reordering buffer, the status of PDUS received by the UE (figure 7A, col. 16 line 64 to col. 17 line 50), and for generating a status report based upon said determination (figure 7A, col. 16 line 64 to col. 17 line 50). Vayanos et al. disclose wherein the status means performs said determination in response to a control signal which indicates that the reordering buffer has been flushed of all PDUs (figure 7A, col. 16 line 64 to col. 17

line 50 as set forth in claim 2), wherein said control signal is an end-of-PDU indication which is generated when all of the PDUS in the buffer have been flushed (col. 9 lines 47-58 as set forth in claim 3), wherein the last PDU in the buffer is unique, and said control signal comprises the last PDU (col. 9 lines 47-58 as set forth in claim 4), wherein the last PDU in the buffer includes a special indicator, and said control signal comprises said special indicator (col. 12 lines 40-44 as set forth in claim 5), wherein the control unit generates said control signal when the reordering buffer has been flushed of all PDUs (figure 7A, col. 16 line 64 to col. 17 line 50 as set forth in claim 6).

One skilled in the art would have recognized flushing said at least one reordering buffer, and would have applied Vayanos et al.'s control channel in Chang et al.'s process of resetting the receiver MAC-hs by the receiver RLC. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Vayanos et al.'s data delivery in conjunction with a hybrid automatic retransmission mechanism in CDMA communication system in Chang et al.'s method for resetting MAC layer entity in a W-CDMA communication system using HSDPA with the motivation being to provide a case where the control channel is received and the New data indicator in the control message is relied on to flush data from the re-ordering queue to higher layers (col. 16 lines 64-67).

For claim 7, Chang et al. disclose whereby the RNC halts data transmissions upon generation of the MAC layer reset notification (figure 18, paragraph [0092]).

For claim 8, Chang et al. disclose whereby the RNC restarts data transmissions upon receipt of said status report (figure 18, paragraph [0092]).

For claim 9, Chang et al. disclose whereby the RNC restarts data transmissions upon receipt of a predetermined trigger (figure 18, paragraph [0092]).

For claim 10, Chang et al. disclose whereby said predetermined trigger is the receipt of said status report (figure 18, paragraph [0092]).

For claim 11, Chang et al. disclose whereby the UE generates an in-sync indication and said predetermined trigger is the receipt of said in-sync indication (figure 1, paragraph [0017]).

For claims 12-17, Chang et al. disclose method for resetting MAC layer entity in a W-CDMA communication system using HSDPA comprising:

detecting at the RNC the need for an HS-DSCH cell change (paragraph [0011] lines 17-26);

notifying the UE to perform a reset (figure 9, reference step 911, paragraphs [0068] to [0071]);

resetting, at said UE (figure 18, reference step 1805, paragraph [0092]); and

transmitting from the UE to the RNC said status report (figure 18, reference step 1811, paragraph [0092]).

However, Chang et al. do not expressly disclose:

including flushing of said at least one reordering buffer;

determining, subsequent to the resetting step, the status of PDUS received at the UE; and

generating a status report based upon said determination.

In an analogous art, Vayanos et al. disclose:

including flushing of said at least one reordering buffer (figure 7A, col. 16 line 64 to col. 17 line 50);

determining, subsequent to the resetting step, the status of PDUS received at the UE(figure 7A, col. 16 line 64 to col. 17 line 50); and

generating a status report based upon said determination (figure 7A, col. 16 line 64 to col. 17 line 50).

Vayanos et al. disclose wherein said determining step is performed in response to a control signal which indicates that the reordering buffer has been flushed of all PDUs (figure 7A, col. 16 line 64 to col. 17 line 50 as set forth in claim 13), wherein said control signal is an end-of-PDU indication which is generated when all of the PDUs in said at least one reordering buffer have been flushed (col. 9 lines 47-58 as set forth in claim 14), wherein the last PDU in said at least one reordering buffer is unique, and said control signal comprises the last PDU (col. 9 lines 47-58 as set forth in claim 15), wherein the last PDU in said at least one reordering buffer includes a special indicator, and said control signal comprises said special indicator (col. 12 lines 40-44 as set forth in claim 16), further including generating said control signal when the reordering buffer has been flushed of all PDUs (figure 7A, col. 16 line 64 to col. 17 line 50 as set forth in claim 17).

One skilled in the art would have recognized including flushing of said at least one reordering buffer, and would have applied Vayanos et al.'s control channel in Chang et al.'s process of resetting the receiver MAC-hs by the receiver RLC. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention,

to use Vayanos et al.'s data delivery in conjunction with a hybrid automatic retransmission mechanism in CDMA communication system in Chang et al.'s method for resetting MAC layer entity in a W-CDMA communication system using HSDPA with the motivation being to provide a case where the control channel is received and the New data indicator in the control message is relied on to flush data from the re-ordering queue to higher layers (col. 16 lines 64-67).

For claim 18, Chang et al. disclose further including halting data transmissions upon said detection (figure 18, paragraph [0092]).

For claim 19, Chang et al. disclose further including restarting data transmissions upon receipt of said status report (figure 18, paragraph [0092]).

For claim 20, Chang et al. disclose further including restarting data transmissions upon receipt of a predetermined trigger (figure 18, paragraph [0092]).

For claim 21, Chang et al. disclose whereby said predetermined trigger is the receipt of said status report (figure 18, paragraph [0092]).

For claim 22, Chang et al. disclose further including generating at the UE an in-sync indication and said predetermined trigger is the receipt of said in-sync indication (figure 1, paragraph [0017]).

For claims 23-27, Chang et al. disclose method for resetting MAC layer entity in a W-CDMA communication system using HSDPA comprising:

means for detecting a reset indication (figure 9, reference step 911, paragraphs [0068] to [0071], and [0092]); and

means for transmitting said data status report (figure 18, reference step 1811, paragraph [0092]).

However, Chang et al. do not expressly disclose:

flushing said at least one reordering buffer in response to said reset indication;

status means for determining, subsequent to flushing of said reordering buffer, the status of data received by the UE; and

means for generating a status report based upon said determination.

In an analogous art, Vayanos et al. disclose:

flushing said at least one reordering buffer in response to said reset indication (figure 7A, col. 16 line 64 to col. 17 line 50);

status means for determining, subsequent to flushing of said reordering buffer, the status of data received by the UE (figure 7A, col. 16 line 64 to col. 17 line 50); and

means for generating a status report based upon said determination (figure 7A, col. 16 line 64 to col. 17 line 50).

Vayanos et al. disclose wherein the status means performs said determination in response to a control signal which indicates that the reordering buffer has been flushed of all PDUs (figure 7A, col. 16 line 64 to col. 17 line 50 as set forth in claim 24), wherein said control signal is an end-of-PDU indication which is generated when all of the PDUs in the reordering buffer have been flushed (col. 9 lines 47-58 as set forth in claim 25), wherein the last PDU in the reordering buffer is unique, and said control signal comprises the last PDU (col. 9 lines 47-58 as set forth in claim 26), wherein the last

PDU in the reordering buffer includes a special indicator, and said control signal comprises said special indicator (col. 12 lines 40-44 as set forth in claim 27).

One skilled in the art would have recognized flushing said at least one reordering buffer in response to said reset indication, and would have applied Vayanos et al.'s control channel in Chang et al.'s process of resetting the receiver MAC-hs by the receiver RLC. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Vayanos et al.'s data delivery in conjunction with a hybrid automatic retransmission mechanism in CDMA communication system in Chang et al.'s method for resetting MAC layer entity in a W-CDMA communication system using HSDPA with the motivation being to provide a case where the control channel is received and the New data indicator in the control message is relied on to flush data from the re-ordering queue to higher layers (col. 16 lines 64-67).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER